

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) Photostructurable liquid composition for the production of a hydrogel layer based on polyacrylamide, comprising: ~~characterized in that the composition has, in addition to the~~ a monomer precursor of the polyacrylamide;

~~the~~ a cross-linking agent; and

~~a~~ photoinitiator;

at least one film former;

at least one comonomer with reactive linker groups; and

at least one softener.

2. (Currently Amended) Composition in accordance with claim 1, ~~characterized in that~~ wherein the film former is a water-soluble polymer.

3. (Currently Amended) Composition in accordance with claim 2, ~~characterized in that~~ wherein the water-soluble polymer is chosen as a film former from the group consisting of polyvinylpyrrolidone, polyacrylamide and/or polyhydroxyethylmethacrylate.

4. (Currently Amended) Composition in accordance with claims 1 to 3, ~~characterized in that~~, wherein the comonomer with reactive linker groups is chosen from the group consisting of maleic anhydride and/or glycidyl(meth)acrylate.

5. (Currently Amended) Composition in accordance with ~~one of~~ claims 1 to 4, ~~characterized in that~~ claim 1, wherein the softener is chosen from the group consisting of mono-, di- and/or triethyleneglycol.

6. (Currently Amended) Composition in accordance with ~~one of~~ claims 1 to 5, characterized in that, wherein the polyacrylamide arrangement is based on at least one of acrylamide, methacrylamide and/or dimethacrylic-acid esters.

7. (Currently Amended) Composition in accordance with ~~one of~~ claims 1 to 6, characterized in that ~~it~~ claim 1, wherein the composition is present in a polar water-miscible solvent.

8. (Currently Amended) A method, comprising:

using ~~use of~~ a composition in accordance with ~~one of~~ claims 2 to 7, for the production of a hydrogel using photostructuring by contact exposure.

9. (Currently Amended) A method, comprising:

using ~~use of~~ a composition in accordance with ~~one of~~ claims 1 to 7, for the production of an immobilizing layer for biomolecules on a transducer surface.

10. (New) Composition in accordance with claim 2, wherein the water-soluble polymer is chosen as a film former from at least one of polyvinylpyrrolidone, polyacrylamide and polyhydroxyethylmethacrylate.

11. (New) Composition in accordance with claim 2, wherein the comonomer with reactive linker groups is chosen from the group consisting of maleic anhydride and glycidyl(meth)acrylate.

12. (New) Composition in accordance with claim 1, wherein the comonomer with reactive linker groups is chosen from at least one of maleic anhydride and glycidyl(meth)acrylate.

13. (New) Composition in accordance with claim 2, wherein the comonomer with reactive linker groups is chosen from at least one of maleic anhydride and glycidyl(meth)acrylate.

14. (New) Composition in accordance with claim 1, wherein the softener includes at least one of mono-, di- and triethyleneglycol.

15. (New) A polar water miscible solvent, comprising the composition in accordance with claim 1.